

This Page Is Inserted by IFW Operations  
and is not a part of the Official Record

## **BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

**IMAGES ARE BEST AVAILABLE COPY.**

As rescanning documents *will not* correct images,  
please do not report the images to the  
Image Problem Mailbox.

PR



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/734,631      | 12/11/2000  | Stefan G. Hild       | CH9-1999-0028       | 5485             |

7590 07/29/2004

Anne Vachon Dougherty  
3173 Cedar Road  
Yorktown Heights  
New York, NY 10598

EXAMINER

TRAN, ELLEN C

ART UNIT PAPER NUMBER

2134

DATE MAILED: 07/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PR

# Office Action Summary

Application No.

09/734,631

Applicant(s)

HILD ET AL.

Examiner

Ellen C Tran

Art Unit

2134

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 11 December 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

Art Unit: 2134

***DETAILED ACTION***

1. This action is responsive to communications: original application filed 11 December 2000 with acknowledgement of a foreign application date of 14 December 1999.
2. Claims 1-25 are currently pending in this application. Claims 1, 8, 12, and 24 are independent claims.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language

4. Claims 1-25 are rejected under 35 U.S.C. 102(e) as being anticipated by Nguyen et al. U.S. Patent No. 6,072,870 (hereinafter '870).

**As to independent claim 1 “A method of transcoding a data message, comprising a plurality of data fields and an authentication code, to produce a transcoded message for transmission to a destination device, the data message being received from a source device wherein said data fields have been coded in accordance with a first coding system, whereby respective data field codes are generated for said data fields and a message code is derived from said data field codes” is taught in '870 col. 16, lines 2-38;**

Art Unit: 2134

**“and wherein said message code has been coded in accordance with a second coding system to generate said authentication code, the method comprising:”** is shown in ‘870 col. 17, lines 20-38;

**“determining for each data field of the received data message whether to maintain, modify or omit that field”** is disclosed in ‘870 col. 42, lines 10-19;

**“for a field to be maintained, maintaining that field in said transcoded message”** is taught in ‘870 col. 46, lines 52-63;

**“for a field to be omitted, coding the field in accordance with said first coding system to generate an omitted field code dependent upon the data field code for that field, and replacing that field by said omitted field code in the transcoded message”** is shown in ‘870 col. 45, lines 4-17;

**“for a field to be modified, coding that field in accordance with said first coding system to generate a modified field code dependent upon the data field code for that field, and replacing that field by a modified field, comprising modified data and said modified field code, in the transcoded message”** is disclosed in ‘870 col. 44, line 58 through col. 45, line 3;

**“and including said authentication code in the transcoded message”** is shown in ‘870 col. 18, lines 3-11.

As to dependent claim 2, **“wherein, for at least some instances of a field to be omitted, the omitted field code comprises the data field code for that field”** is taught in ‘870 col. 45, lines 4-17.

As to dependent claim 3, **“wherein said message code has been derived in said source device by coding the data field codes for predetermined groups of fields**

Art Unit: 2134

to generate respective group codes, and wherein, for a field to be omitted: if all fields in the corresponding group are to be omitted, then the omitted field code comprises the group code for that group, and the group of fields is replaced by said group code in the transcoded message; if less than all fields in the corresponding group are to be omitted, then the omitted field code comprises the data field code for that field” is shown in ‘870 col. 45, lines 4-17.

As to dependent claim 4, “wherein, for a field to be modified, the modified field code is generated by generating the data field code for that field and coding said modified data in accordance with said first coding system to generate a modified data code, said modified field code being representative of the difference between that data field code and said modified data code” is disclosed in ‘870 col. 44, line 54 through col. 45, line 3.

As to dependent claim 5, “further comprising inserting markers in the transcoded message, each marker indicating whether a respective portion of the transcoded message corresponds to a maintained, modified or omitted field of the received data message” is taught in ‘870 col. 20, lines 27-31.

As to dependent claim 6, “wherein said first coding system is a hashing algorithm whereby said data field codes are hash values” is shown in col. 16, lines 16-38.

As to dependent claim 7, “wherein: said first coding system is a hashing algorithm whereby said data field codes are hash values; said message code is the root hash value of a hash tree calculated from said data field codes; and said group

Art Unit: 2134

**codes are the hash values of respective parent nodes of said hash tree” is disclosed in ‘870 col. 16, lines 16-38.**

**As to independent claim 8, “A method of processing a data message, comprising a plurality of data fields and an authentication code, received from a source device wherein said data fields have been coded in accordance with a first coding system, whereby respective data field codes are generated for said data fields and a message code is derived from said data field codes” is taught in ‘870 col. 16, lines 2-38;**

**“and wherein said message code has been coded in accordance with a second coding system to generate said authentication code, the method comprising: producing a transcoded message from the received data message by:” is shown in ‘870 col. 17, lines 20-38;**

**“determining for each data field of the received data message whether to maintain, modify or omit that field” is disclosed in ‘870 col. 42, lines 10-19;**

**“for a field to be maintained, maintaining that field in said transcoded message” is taught in ‘870 col. 46, lines 52-63;**

**“for a field to be omitted, coding the field in accordance with said first coding system to generate an omitted field code dependent upon the data field code for that field, and replacing that field by said omitted field code in the transcoded message” is shown in ‘870 col. 45, lines 4-17;**

**“for a field to be modified, coding that field in accordance with said first coding system to generate a modified field code dependent upon the data field code for that field, and replacing that field by a modified field, comprising modified data**

Art Unit: 2134

**and said modified field code, in the transcoded message; and including said authentication code in the transcoded message”** is disclosed in ‘870 col. 44, line 58 through col. 45, line 3;

**“transmitting the transcoded message to a destination device; and in said destination device: deriving a received message code from the transcoded message using maintained fields, modified fields and omitted field codes in said message in accordance with said first coding system”** is taught in ‘870 col. 19, lines 19-41;

**“comparing the received message code with the message code encoded in said authentication code in accordance with said second coding system; and displaying a user message dependent upon the result of the message code comparison”** is shown in ‘870 col. 35, lines 46-48.

As to dependent claim 9, **“wherein, at least if the received message code is identical to the message code encoded in said authentication code, said user message comprises the maintained data fields and said modified data from the transcoded message”** is disclosed in ‘870 col. 37, lines 42-61.

As to dependent claim 10, **“wherein said user message comprises transcode indicators indicative of the location in the displayed message of fields omitted or modified from the data message as sent by the source device”** is taught in ‘870 col. 38, lines 49-61.

As to dependent claim 11, **“further comprising: storing data fields received from said source device which fields are omitted or modified in producing the transcoded message; transmitting a stored data field to the destination device in response to a transcoded field request from the destination device; and at the**



Art Unit: 2134

**destination device, displaying the stored field received pursuant to said request” is shown in ‘870 col. 38, lines 49-61.**

**As to independent claim 12, this claim is directed to the transcoder of the method of claim 1 and it is rejected along the same rationale.**

**As to dependent claims 13-18, these claims contain substantially similar subject matter as claims 2-7; therefore they are rejected along the same rationale.**

**As to dependent claim 19, “wherein the transcoder logic is further configured to output a stored field of the received data message to the transmitter means for transmission to the destination device in response to receipt of a transcoded field request from the destination device” is taught in ‘870 col. 19, lines 19-41.**

**As to dependent claim 20, “the destination device comprising a memory for storing a received transcoded message, a display, and control logic configured to: derive a received message code from the transcoded message using maintained fields, modified fields and omitted field codes in said message in accordance with said first coding system; compare the received message code with the message code encoded in said authentication code in accordance with said second coding system; and to supply a user message, dependent upon the result of the message code comparison, to the display for display to a user” is shown in ‘870 col. 35, lines 46-48.**

**As to dependent claims 21-23, these claims contain substantially similar subject matter as claims 9-11; therefore they are rejected along the same rationale.**

**As to independent claim 24, this claim is directed to the data communication systems of the methods of claims 1 and 8; therefore it is rejected along the same rationale.**

Art Unit: 2134

As to dependent claim 25, "including a source device for generating a data message, the source device comprising: message processing logic configured to divide data to be included in a data message into a plurality of data fields, to code said data fields in accordance with said first coding system whereby respective data field codes are generated for said data fields and a message code is derived from said data field codes, and to code said message code in accordance with said second coding system to generate an authentication code for the message; and means for transmitting a data message, comprising said plurality of data fields and said authentication code, to said transcoder" is taught in '870 col. 13, lines 16-32.

### **Conclusion**

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ellen C Tran whose telephone number is (703) 305-8917. The examiner can normally be reached on 6:30 am to 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory A Morse can be reached on (703) 308-4789. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-5484.

*Ellen. Tran*  
*Patent Examiner*  
*Technology Center 2134*  
22 July, 2004

*Andrew Caldwell*  
*Andrew Caldwell*